Contents of Volume 26 (1987)

Nos. 1–2 issued November, 1987

T. Ohta
Very Slightly Deleterious Mutations and the Molecular Clock **1**

G. Preparata, C. Saccone
A Simple Quantitative Model of the Molecular Clock **7**

M. Syvanen
Molecular Clocks and Evolutionary Relationships: Possible Distortions Due to Horizontal Gene Flow **16**

M. Kimura
Molecular Evolutionary Clock and the Neutral Theory **24**

E. Zuckerkandl
On the Molecular Evolutionary Clock **34**

G.A. Dover
DNA Turnover and the Molecular Clock **47**

J.A. Lake
Determining Evolutionary Distances from Highly Diverged Nucleic Acid Sequences: Operator Metrics **59**

H. Ochman, A.C. Wilson
Evolution in Bacteria: Evidence for a Universal Substitution Rate in Cellular Genomes **74**

T.H. Jukes
Transitions, Transversions, and the Molecular Evolutionary Clock **87**

C.G. Sibley, J.E. Ahlquist
DNA Hybridization Evidence of Hominoid Phylogeny: Results from an Expanded Data Set **99**

J. Felsenstein
Estimation of Hominoid Phylogeny from a DNA Hybridization Data Set **123**

M. Hasegawa, H. Kishino, T. Yano
Man's Place in Hominoidea as Inferred from Molecular Clocks of DNA **132**

T. Gojobori, S. Yokoyama
Molecular Evolutionary Rates of Oncogenes **148**

R. DeSalle, T. Freedman, E.M. Prager, A.C. Wilson
Tempo and Mode of Sequence Evolution in Mitochondrial DNA of Hawaiian *Drosophila* **157**

Recently Published Papers in the Field of Molecular Evolution **165**

Indexed in *Current Contents*

No. 3 issued December, 1987

J. G. Kaplan, D. L. Brown, N. Chaly, W. L. Greer, K. V. S. Prasad, A. Severini, B. M. Sahai
Structural and Evolutionary Implications of the Packaging of DNA for Differentiation and Proliferation in the Lymphocyte **173**

C. Willard, H. T. Nguyen, C. W. Schmid
Existence of at Least Three Distinct Alu Subfamilies **180**

R. Nussinov, A. Barber, J. V. Maizel, Jr.
The Distributions of Nucleotides Near Bacterial Transcription Initiation and Termination Sites Show Distinct Signals That May Affect DNA Geometry **187**

D. Mouchiroud, G. Fichant, G. Bernardi
Compositional Compartmentalization and Gene Composition in the Genome of Vertebrates **198**

C. Saccone, M. Attimonelli, E. Sbisà
Structural Elements Highly Preserved During the Evolution of the D-Loop-Containing Region in Vertebrate Mitochondrial DNA **205**

U. Niesbach-Klösgen, E. Barzen, J. Bernhardt, W. Rohde, Z. Schwarz-Sommer, H. J. Reif, U. Weinand, H. Saedler
Chalcone Synthase Genes in Plants: A Tool to Study Evolutionary Relationships **213**

C. L. Manske, D. J. Chapman
Nonuniformity of Nucleotide Substitution Rates in Molecular Evolution: Computer Simulation and Analysis of 5S Ribosomal RNA Sequences **226**

D. A. Hickey, B. F. Benkel, P. H. Boer, Y. Genest, S. Abukashawa, G. Ben-David
Enzyme-Coding Genes as Molecular Clocks: The Molecular Evolution of Animal Alpha-Amylases **252**

E. Otaka, T. Ooi
Examination of Protein Sequence Homologies: IV. Twenty-Seven Bacterial Ferredoxins **257**

A. M. Liquori, C. Sadun, A. Battisti
Quasi-Periodic Primary Structures of Core Proteins of Human T-Lymphotropic Leukemia Retroviruses **269**

R. Breckenridge, M. J. Dufton
The Structural Evolution of Cobra Venom Cytotoxins **274**

Recently Published Papers in the Field of Molecular Evolution **284**

Indexed in *Current Contents*

No. 4 issued December, 1987

J. Visscher, A. W. Schwartz
Nucleic Acid-Like Structures III. Oligomerization of 3′-Deoxyadenosine 2′,5′-Diphosphoimidazolide **291**

A. García-Tejedor, A. R. Castaño, F. Morán, F. Montero
Studies on Evolutionary and Selective Properties of Hypercycles Using a Monte Carlo Method **294**

P. Perrin, G. Bernardi
Directional Fixation of Mutations in Vertebrate Evolution **301**

Th. Hankeln, E. R. Schmidt
Cotransposition of a Highly Repetitive DNA Element with Flanking Sequences in the Genome of the Midge *Chironomus thummi* **311**

H. Brinkmann, P. Martinez, F. Quigley, W. Martin, R. Cerff
Endosymbiotic Origin and Codon Bias of the Nuclear Gene for Chloroplast Glyceraldehyde-3-Phosphate Dehydrogenase from Maize **320**

W. L. Gerlach, E. S. Dennis, W. J. Peacock, M. T. Clegg
The Ds1 Controlling Element Family in Maize and *Tripsacum* **329**

P. J. Avery
The Analysis of Intron Data and Their Use in the Detection of Short Signals **335**

K. Nicoghosian, M. Bigras, D. Sankoff, R. Cedergren
Archetypical Features in tRNA Families **341**

G. Harauz, M. Stoeffler-Meilicke, M. van Heel
Characteristic Views of Prokaryotic 50S Ribosomal Subunits **347**

F. J. Castellino, J. M. Beals
The Genetic Relationships between the Kringle Domains of Human Plasminogen, Prothrombin, Tissue Plasminogen Activator, Urokinase, and Coagulation Factor XII **358**

Recently Published Papers in the Field of Molecular Evolution **370**

Erratum **377**

Index to Volume 26

Indexed in *Current Contents*